

TYPE: About 33 km NE of Teotitlán del Camino on road to Huautla, by waterfall in cut-over woods, Distrito Teotitlán, Oaxaca, Mexico, ca. 7000 ft alt, 15 Sept 1970, *Mickel 4544* (NY; isotype US).

Other collection seen: Teocelo Falls, Veracruz, Mexico, *S. N. Rhoads s.n.*, March 1899 (US).

This species resembles most closely *Cystopteris protrusa* in its wide-creeping rhizome, which protrudes beyond the leaves, and in its veins, which end in the teeth. But it differs from *C. protrusa* in having a narrower blade, broader pinnules, thinner lamina, and blunter spines on the spores. Furthermore, the rhizome of *C. protrusa* is clothed with fine hairs that resemble root hairs in addition to the sparse, pale scales, whereas *C. membranifolia* has only darker and shinier scales. Although most of the spores seem to be normal, some are much smaller and more irregular in shape and some are somewhat larger and rounder. Whether these reflect irregularities in reproduction or whether this is normal for the species cannot be determined. There are few sporangia per sorus and few sori on the plants, and so the sample is small. The size of the normal spores is precisely that reported by Blasdell² for diploid plants of the genus.

I plan to return to the locality with hopes of collecting living plants for cultivation in our new research greenhouse.

² Blasdell, R. F. 1963. A monographic study of the fern genus *Cystopteris*. Mem. Torrey Bot. Club 21(4): 1-102.

SHORTER NOTES

THE FIRST PERUVIAN RECORD OF ELAPHOGLOSSUM CARDENASII WAGNER.—The most peculiar species of the genus *Elaphoglossum* is the one called *E. cardenasii* by Wagner (Bull. Torrey Bot. Club 81: 61-67, figs. 1-7. 1954). It has pedately lobed fronds, which is most peculiar in a genus of several hundred species characterized by having simple, unlobed blades.

The type and isotype specimens of this rare fern are Bolivian. Since its description, only one other specimen was known, a collection from the same general area reported by Stolze (Amer. Fern J. 58: 31-32. 1968). During a recent visit to the Herbarium Vargasianum, in Cuzco, Peru, which now is deposited at the Universidad del Cuzco, two specimens collected by C. Buës in a nearby locality (Alturas de Sicre, 10,000 ft., June 1924) were found to be *E. cardenasii* Wagner. These are the first record of the species outside Bolivia. One of the specimens bears an annotation by Wm. Maxon: "a monstrous form." No fertile blades are present, but a regular progression of juvenile fronds are present which might provide data for solving the development of the leaf structure of this interesting fern.—*Luis Diego Gómez P., Herbario Nacional de Costa Rica, Apartado 749, San José, Costa Rica.*